

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/49513

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04B 7/14

US CL : 455/422,11.1,449,517,500,435,522,466,456; 342/457,463

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 455/422,11.1,449,517,500,435,522,466,456; 342/457,463

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	US 6,418,299 B1(RAMANATHAN), 09 July 2002, See abstract and summary of invention	1
A	US 6,418,299 B1 (RAMANATHAN), 09 July 2002, See abstract and summary of invention.	2,28,29,40,56,60,79,8 1,83
A	US 6,405,102 B1 (SWARTZ et al), 11 June 2002, See abstract and summary of invention, col. 1, line 1- col. 7, line 42	2,28,29,40,56,60,79,8 1,83
A	WO 00/68907 (WERB et al), 16 November 2000, See abstract, summary of invention, page 3, line 18 - page 12, line 18.	2,28,29,40,56,60,79,8 1,83
A	US 6,125,306 A (SHIMADA et al), 26 September 2000, See abstract and summary of invention	2,28,29,40,56,60,79,8 1,83
A	US 6,313,745 B1 (SUZUKI), 06 November 2001, See abstract, summary of invention, col. 3, line 45-col.11, line10	2,28,29,40,56,60,79,8 1,83
A	US 6,201,974 B1 (LIETSALMI et al), 13 March 2001, See absrtact, summary of invention	1



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"B" earlier application or patent published on or after the international filing date

"I" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

11 June 2003 (11.06.2003)

Date of mailing of the international search report

25 JUN 2003

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703)305-3230

Authorized officer

Sujatha Sharma

Telephone No. 703-305-3800

Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

International Application No
PCT, 32005/050189A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L12/56

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/119770 A1 (TWITCHELL ROBERT W ET AL) 29 August 2002 (2002-08-29) paragraph '0008! - paragraph '0010! paragraph '0036! paragraph '0061! - paragraph '0062!	1-9
X	WO 03/032501 A (TWITCHELL, ROBERT, W. , JR; SEEKERNET INCORPORATED) 17 April 2003 (2003-04-17) the whole document	1-9

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

23 June 2005

Date of mailing of the international search report

04/07/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Chassatte, R

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2005/050189

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002119770 A1	29-08-2002	US 2004082296 A1	29-04-2004
		US 2005093702 A1	05-05-2005
		US 2005093703 A1	05-05-2005
		EP 1389368 A2	18-02-2004
		WO 03032501 A2	17-04-2003
WO 03032501 A	17-04-2003	EP 1389368 A2	18-02-2004
		WO 03032501 A2	17-04-2003
		US 2004082296 A1	29-04-2004
		US 2002119770 A1	29-08-2002
		US 2005093702 A1	05-05-2005
		US 2005093703 A1	05-05-2005

Form PCT/ISA/210 (patent family annex) (January 2004)